

DEVELOPING A METHOD TO MEASURE CUSTOMER SATISFACTION

Executive Development

Developing a Method to Measure Customer Satisfaction for the

Laguna Beach Fire Department

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Abstract

The problem was the Laguna Beach Fire Department did not know their customer's satisfaction levels. The purpose of this project was to develop a method to measure customer satisfaction. Research questions answered are:

1. What is the value of knowing the citizen and emergency service provider's perception of the level of customer satisfaction for services?
2. What are the elements of an effective customer satisfaction measuring method?
3. What methods do other fire departments utilize to measure customer satisfaction?
4. What do the L.B.F.D. service providers think is important criteria to measure customer satisfaction?
5. What do the customers of L.B.F.D. think is important criteria to measure customer satisfaction?

This action research project's emphasis was to develop a survey instrument for measuring customer satisfaction. Questions were answered through literature review, citizen, and fire service personnel surveys. A cover letter, survey instrument, data collection spreadsheet, implementation plan, management strategy and further recommendations are discussed.

Table of Contents

	Page
Abstract	2
Table of Contents	3
Introduction	4
Background and Significance	5
Literature Review	6
Procedures	12
Results	13
Discussion	32
Recommendations	34
Reference List	36

Appendices

Appendix A: Emergency Services Customer Satisfaction Survey Criteria – FD	38
Appendix B: Emergency Services Customer Satisfaction Survey Criteria – Citizen	39
Appendix C: Customer Satisfaction Survey Cover Letter – FD	40
Appendix D: Customer Satisfaction Survey Cover Letter – Citizen	41
Appendix E: Orange County Fire Department Survey	42
Appendix F: Customer Satisfaction Survey Cover Letter – Final Product	43
Appendix G: Customer Satisfaction Survey – Final Product	44
Appendix H: Survey Response Breakdown Spreadsheet	45

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Introduction

Customer service is a primary component of most successful business designs.

Organizations first started focusing on the importance of recognizing the needs of the customer in the 1950's by developing "the marketing concept" (Woods, 1999). Successful organizations consider the needs of the customer and develop a system which focuses on delivering customer satisfaction through services and goods.

Customer service is a relatively new marketing aspect within the fire service (May, 2005). Fire Departments only recently realized the importance of customer care and the far reaching impact it has on the fire service. Every customer service organization's goal should be to provide customer satisfaction (Finch, 1998). The fire service has typically been successful at delivering high levels of customer satisfaction. As a matter of survival progressive organizations will evaluate what they are doing correctly and identify opportunities to improve goods and services.

The process of identifying what is being done correctly requires engaging the customer (Weinzweig, 2004). Internal and external customer's opinions should be considered for any process improvement. Though there are many ways to obtain customer feedback the most common source of direct data is the survey (Thor, 1994). The quality of information that a survey provides is dependent upon the design of the instrument.

The Community of Laguna Beach expects high quality suppression and emergency medical services (EMS). The problem is the Laguna Beach Fire Department (L.B.F.D.) does not know what the community's customer satisfaction level is for EMS and suppression services. The purpose of this project is to develop a method to measure customer satisfaction for EMS and

suppression services provided by the Laguna Beach Fire Department. The research questions that will be answered for this project are: (1) What is the value of knowing the citizen and emergency service provider's perception of the level of customer satisfaction for EMS and suppression services? (2) What are the elements of an effective customer satisfaction measuring method? (3) What methods do other fire departments utilize to measure customer satisfaction? (4) What do the L.B.F.D. service providers think is important criteria to measure customer satisfaction? (5) What do the customers of L.B.F.D. think is important criteria to measure customer satisfaction?

Background and Significance

The City of Laguna Beach is a 9.1 square mile seaside community on the Southern California Coast with a resident population of 23,727 that can swell upward of 100,000 during peak tourism periods. Laguna Beach is an affluent community with a median household income of \$82,944 and an average median home price of \$1,229,484 (Cable News Network, 2006). The community is known for having a rich tradition in art and possessing some of the most picturesque beaches and open space in the world.

The Laguna Beach Fire Department staffs four 4 stations with 12 on-duty firefighters and employs 40 sworn and 2 non-sworn personnel. Each station houses a type 1 engine which is staffed with a Captain, Engineer, and Firefighter. Stations 1 and 4 are paramedic engines providing ALS level care and Stations 2 and 3 provide BLS level care. L.B.F.D. has strong mutual and automatic aid agreements which assist with providing full service. Services provided include: EMS, fire suppression, rescue, Haz-Mat, fire prevention, and public education. In 2005 2,404 calls for service were answered as follows: 1,491 EMS, 78 fires, 117 Haz-Mat, 185 service calls, 182 fire alarms, 324 Good intent, and 27 special conditions.

The Laguna Beach Fire Department has adopted an organizational philosophy of “Safety and Service.” The service component of this mantra is the focus of this research paper. The command staff of L.B.F.D. realizes the importance of delivering quality products and services and the need to measure the customer’s actual experience against their perception of quality. The process of measuring customer feedback against the services provided offers the opportunity for improvement.

One alternative to identifying opportunities for improvement is to do nothing. The National Fire Academy’s Executive Development Course encourages managers to look for ways to improve processes and support the U.S.F.A.’s mission by helping to identify opportunities to reduce life or economic loss due to fires and related emergencies. This project will help to identify possible emergent issues. It will be the responsibility of L.B.F.D. to analyze the data collected and act in a timely manner on those areas that support the mission of reducing loss to life and property.

This will be an action research project with the emphasis being on developing a survey instrument for measuring customer satisfaction. As a result of a comprehensive literature review and surveys the project will identify the most effective method of measuring customer satisfaction. It is anticipated that the research will also provide direction for the training and implementation necessary to develop a successful plan. These additional components and their applicability will be identified in the project.

Literature Review

Customer service in the Fire Service has been a topic of great interest in recent years. Progressive Fire Chiefs understand the value of knowing the level of customer satisfaction their organizations provide and identifying opportunities for improvement. In fact top management is entirely responsible for the quality of service their organizations provide (Deming, 1994, p. 174).

While successful managers will realize the importance of customer satisfaction they must also understand that it is an evolving process. Customer satisfaction is a moving target; the rate of change drives customer expectation, which then drives the rate of change (Osbourne, 2004, p. 209).

Value of Knowing Customer Satisfaction

The answer to why customer service is important to the fire service's survival is complex. Empirical data suggests that service quality has a direct impact on citizen's confidence in government (Osbourne, 2004, p. 209). City administrators, mayors, and city councils have a much easier time justifying the allocation of precious resources to a department that makes its leaders look good (Lasky, 2004, p. 127). Competing interests for limited resources forces successful fire service managers to identify opportunities to improve efficiency. It is a potential liability to be uninformed regarding the level of customer satisfaction that an organization provides.

Internal and external customers exist within every organization whether they provide services or products. The definition of a customer is as simple as any person other than you (Gee, 1999, p. 4). Internal customers of the fire department may be other city departments and government agencies or most obviously other members of the fire department. It is important for members of the fire department team to realize that the quality of their work directly affects all members of the team. Every fire department management team's focus should be to support the line personnel by ensuring that they have the necessary tools and are empowered to provide top quality customer service (Evans, 2003).

Value of knowing the service provider's perception of customer satisfaction levels.

Measuring internal customer service provides the organization with the opportunity to "look into the mirror." Input should be solicited from all members of the organization and

nothing should be given sacred status. The data should be analyzed and the current status of internal customer satisfaction should be shared with all members of the organization.

Opportunities for improvement should be identified and the emphasis should be placed on transitioning from internal customer service to customer satisfaction. Internal customer satisfaction will develop a bond of trust between the team members and the organization and help to create a high performing organization (Zemke, 1999, p. 369).

Astute organizations should not be overly reliant upon customer feedback as the sole source for new ideas. Deming (1994) argues that the customer produces nothing and is not the engine that drives innovation. Innovation is typically driven by the need to separate an organization's products or services from its competitors. The need to build a better mouse trap is driven by the need to sell more mouse traps. To spark innovation we should ask "what product or service would help our customers more" (Deming, 1994, p. 10).

Successful organizations must constantly challenge themselves to identify opportunities to improve their service or product. The pursuit of constant improvement must be integral to the organizational culture. Members of the organization must realize they have the best vantage point to identify possibilities for improvement. This process of identifying what the customer needs is integral to the long term success of any organization (Weinzweig, 2004, p. 19). Fire Chiefs should strongly consider getting early buy-in from the labor union and a commitment to be involved with developing a customer service plan (Evans, 2003).

Value of knowing the customer's perception of customer satisfaction levels.

The value of knowing how a customer rates a product or service seems obvious but is often ignored in many organizations. Successful companies realize that the customer is an integral component of the systems approach to managing a business. The final component of the systems equation is the supplier and Woods (1999) explains that the supplier, organization, and

customer work together toward the success of an organization. Without acknowledging the customer in the systems equation the organization loses the opportunity to continually improve the system (Woods, 1999, p. 8). Deming (1994) illustrates the idea of continual improvement through a “feedback loop” which involves obtaining information from the customer regarding the quality of the service or product (p. 59).

A customer’s perceived level of service or quality of product(s) provided compared to their ideal expectation is referred to as perceived quality (Zifco-Baliga, 1999, p. 98). Perceived quality is the difference between what a customer believes they received and what they feel they should have received. The difference in service delivery or product quality is where organizations have a clear opportunity to improve. Gaps in service delivery or product quality may also be referred to as customer needs (Gee, 1999, p. 49). Identifying customer needs requires obtaining feedback and analyzing the data for cues (Zifco-Baliga, 1999, p. 99).

Elements of an Effective Customer Satisfaction Measuring Method.

The survey cover letter provides an important first impression of the organization to the recipient (Shaver, 1999, p. 270). The cover letter should persuade the reader that their feedback is valuable and appreciated. Cover letters should be brief and to the point while including the following: professional appearance, explain what the survey is about and the importance of the information, state who is requesting the information, promise anonymity, explain if the information will be shared and how utilized, explain how the respondent was selected, offer appreciation for their effort, how long the survey will take, and how to return the survey (Shaver, 1999, p. 270).

Most customer surveys typically contain three parts: overall measures of satisfaction, ratings of key performance attributes and demographics questions (Chisholm, 1999, p. 307). Surveys may also ask the customer to rate the service level of each attribute and to rate its

importance as well. This information can be used to measure the gaps between performance and importance which provides actionable items for management (Chisholm, 1999, p. 307).

Confidentiality and customer anonymity are critical components because many customers will not respond candidly if at all to surveys unless it can be guaranteed (Chisholm, 1999, p. 311).

The questions asked in a survey may be categorized into four types of responses (Gillham, 2002). Characteristics of the four responses are: (a) selected responses, where the surveyor provides the answer; (b) ranked responses, where the respondents judge the merit of the items asked; (c) scaled responses, answers are ranked on a scale; (d) specified responses, open ended questions requiring a written response. All of the response types have advantages and disadvantages based on the needs of the surveyor and the resources available. While open-ended questions may be rich in data they are difficult to compare, lack focus, lack user friendliness, and are difficult to tabulate (Alreck & Settle, 1995). The questionnaire should be focused, brief, and simple thus providing clarity and reducing the chances for errors (Alreck & Settle, 1995). Regardless of the survey instrument's design it should also include brief but complete instructions explaining how the survey should be completed (Shaver, 1999, p. 271).

Once the survey instrument is designed it must be administered, collected, analyzed, and acted on (Shaver, 1999, p.266). Data entry must organize the information so that it can be easily understood and utilized. A well designed survey instrument will provide management with a tool to assess the organization's strengths, weaknesses, opportunities, and threats (Shaver, 1999, p. 270).

The time and cost of administering a survey can be most effectively managed by utilizing a random sample (Alreck & Settle, 1995). The size of the sample population is most accurately determined by utilizing the size of the entire population and determining the confidence level desired. Two factors that must be considered before calculating the sample size is the confidence

interval and confidence level. The confidence level (expressed in a percentage) represents the percentage of time that the entire population would respond within that particular confidence level (www.surveysystem.com, 2003). The confidence interval is the plus or minus factor applied to a response which represents the margin of error (www.surveysystem.com, 2003).

Once the sample size is known a method for selecting a random sample may be chosen. When the population and sample sizes are known a selection procedure known as the *n*th name sampling technique may be used (Gillham, 2000). This method requires the selection of one customer per a certain number of customers served. Randomly generated survey samples may also be employed based on the needs and resources available to the survey administrator.

There are obvious advantages and disadvantages for every method of collecting direct data. Interview styles such as face-to-face or telephone surveys can collect rich data but can have unintended influences on the results and are much more costly than mail surveys (Shaver, 1999, p. 268). Mail surveys are the lowest cost per respondent and lack interviewer bias but also have the lowest overall response rate (Shaver, 1999, p. 268). E-mail or web surveys are rapidly becoming accepted as an excellent alternative to mail surveys. It is anticipated that at its current rate the Internet will become the most widely used method to measure customer satisfaction (Chisholm, 1999, p. 305).

Data processing should begin with assigning a unique code to the survey responses before it is administered (Alreck & Settle, 1995). The codes should provide for ease of data entry and the use of spreadsheets for data analysis. Data should be collected on a regular basis so that response rates and trends can be evaluated (Alreck & Settle, 1995). One clear advantage of an internet based survey is that may be designed to automatically enter the data as the survey is completed. This allows for real-time data to be examined and eliminates the need for manual data entry (Chisolm, 1999, p. 314).

Data analysis should create an audit trail to evaluate response rates, develop a descriptive summary report, capable of benchmarking against industry data, and provide actionable data (Shaver, 1999, p. 269). The data report should be easy to understand and interpret while providing a complete picture of the findings. Management should evaluate the value and quality of the information and make recommendations for improvement if necessary. Management action should also include identifying threats and opportunities as well as taking action to create value-added products and services (Shaver, 1999, p. 270).

Procedures

Upon considering the various options available for obtaining data it was determined that the utilization of surveys was the most effective way to complete this research project. Three distinct populations have been identified as being useful for obtaining a sufficient amount of varied data. The three groups surveyed were: all Fire Departments in Orange County, California; all members of the Laguna Beach Fire department; and a random survey of Laguna Beach residents.

Identical survey questions were sent to Laguna Beach firefighters and residents (see appendices A and B). The difference between the two surveys was the greeting and cover letters (see appendices C and D). The purpose of the two surveys was to answer the following research questions: what do L.B.F.D service providers think is important criteria to measure customer satisfaction, and what do the customers of L.B.F.D. think is important criteria to measure customer satisfaction?

The survey format was developed based on the information found in the literature review. The questions were also developed as a result of the literature review and focused toward EMS and suppression services. Each criteria required the respondent to rank its importance on a scale of one to five. One was the least important and five was the most important to the respondent.

Since the survey design required uniform ranked answers the information was effectively tabulated and analyzed. A comments section was included to assist with identifying additional opportunities to measure customer satisfaction.

During May, 2006 all 41 members of L.B.F.D. were provided a survey by inter-department mail or hand delivered and requested to return the completed survey by May 19, 2006. An online survey sample size calculator (www.surveysystems.com) was utilized to determine the appropriate sample size of the citizen survey. The accuracy of the feedback from the survey is directly proportional to the number of customers surveyed. A population of 1,400 was used which represents the approximate number of Laguna Beach residents that received EMS or suppression services in 12 months. A confidence level of 95 and a confidence interval of 5 were utilized to strike a balance between cost effectiveness and accuracy. On May 2nd, 2006 a total of 320 surveys were mailed by first class mail to Laguna Beach residents.

Research question number three asks the following: what methods do other fire departments utilize to measure customer satisfaction? On May 21, 2006 11 Orange County Fire Departments were contacted by phone and asked the following questions: does your department measure customer satisfaction, and if so, how (see appendix E)?

Results

The results of the research conducted for this project produced a cover letter, survey instrument, and a data tracking spreadsheet for the purpose of measuring customer satisfaction for emergency services provided by the Laguna Beach Fire Department (see appendices F, G, and H). The project utilized feedback obtained from surveys sent to Laguna Beach firefighters and residents to develop a customer satisfaction survey. The survey instrument was compared to survey methods utilized by respondent Orange County Fire Departments for evaluation purposes.

Research Question 1: What is the value of knowing the citizen and emergency service provider's perception of the level of customer satisfaction for EMS and suppression services?

Successful business models include customer satisfaction as a component of the production cycle (Deming, 1994, p. 59). This proven method of marketing services and products has been utilized for over 50 years. The gap between what customers believe they received and what they actually received provides an organization with the opportunity to improve products or services (Gee, 1999, p. 49). Identifying opportunities to improve products or services requires obtaining feedback and analyzing the data for cues (Zifco-Baliga, 1999, p. 99).

The advantage to measuring internal customer satisfaction is identifying opportunities to create a high performing team while developing a bond of trust among the organization's team members (Zemke, 1999, p. 369). Identifying opportunities for new products or services is typically a result of innovation from within the organization (Deming, 1994, p. 10). An organizational philosophy of constant improvement and trust will translate into innovation and identifying opportunities to improve products and services.

Research Question 2: What are the elements of an effective customer satisfaction measuring method?

The first component of any effective customer satisfaction measuring tool is the method by which the customer will be compelled to provide feedback. In the case of a mailed survey the cover letter provides this crucial component and gives an important impression of the organization (Shaver, 1999, p. 270). Organizations must determine what their information requirements are. Organizations must also determine the customer satisfaction measuring method that is best suited to their organization. Mail surveys are the most cost effective and are typically void of bias if designed correctly (Shaver, 1999, p. 268). The internet is fast becoming

a cost effective way to administer surveys as internet access and technology is increasing (Chisholm, 1999).

Once the survey instrument is designed and administered the remaining elements to consider are: collecting the data, analyzing the data, and taking necessary action (Shaver, 1999, p. 266). The data should be collected and organized into an easily understood summary report. Management should provide feedback on the effectiveness and thoroughness of the information contained in the report. Management should also identify strengths and weaknesses and act to provide improved services and products (Shaver, 1999, p. 270).

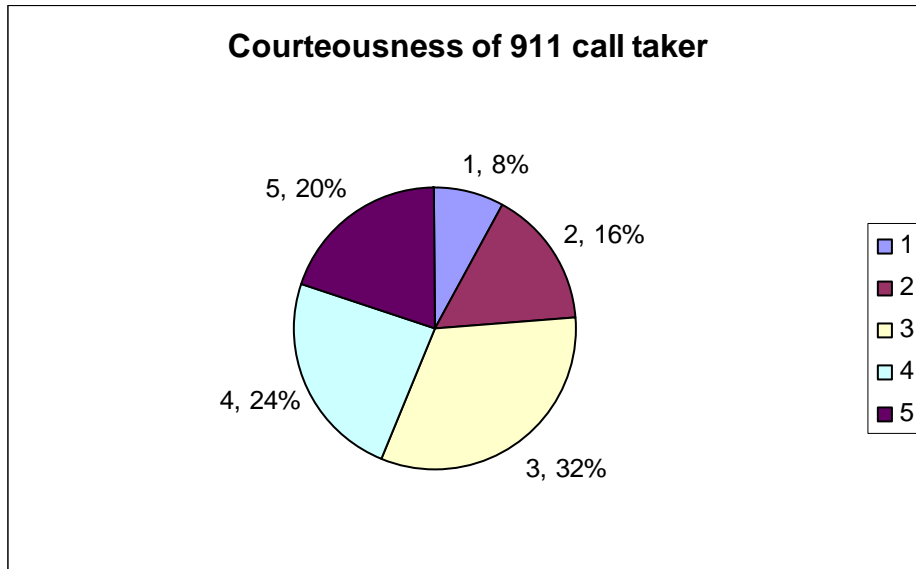
Research Question 3: What methods do other fire departments utilize to measure customer satisfaction?

Research question 3 was answered by a survey of all Orange County, CA fire departments. Due to the limited size and scope of this project it would be impractical to conduct an exhaustive nationwide search of all fire departments. Of the 11 Orange County, CA fire departments surveyed, 10 (91%) responded to the survey questions and 3 (28%) of the respondents measure customer satisfaction as follows: 100% utilize mail surveys, 0% conduct interviews, and 0% utilize other methods.

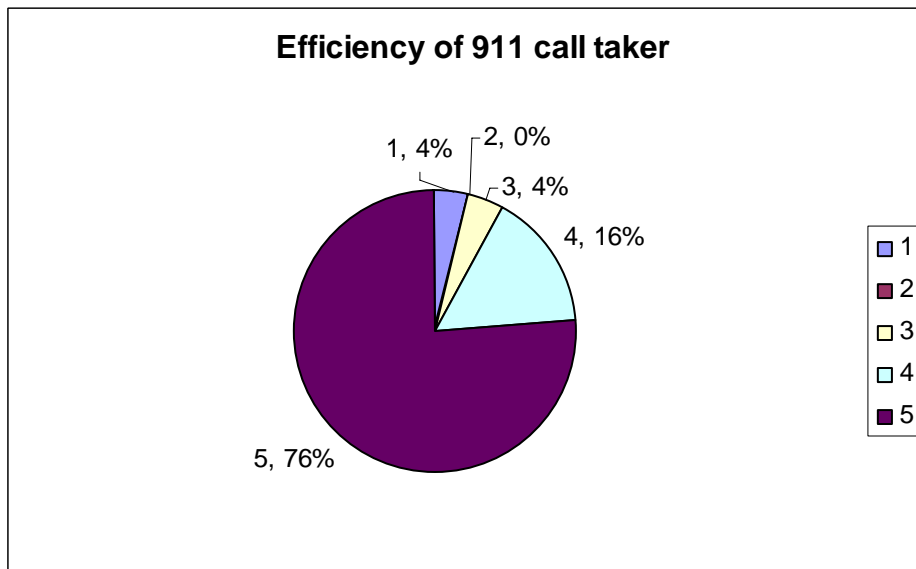
Research Question 4: What do L.B.F.D. service providers think is important criteria to measure customer satisfaction?

41 members of L.B.F.D. were surveyed and 25 (63%) members responded to the criteria for measuring customer satisfaction survey. Each question utilized a ranked scale format from 1 to 5 and could only have one answer. A ranking of 1 is the lowest level of importance and a ranking of 5 is the highest level of importance. Listed is the response to each question and a corresponding graph.

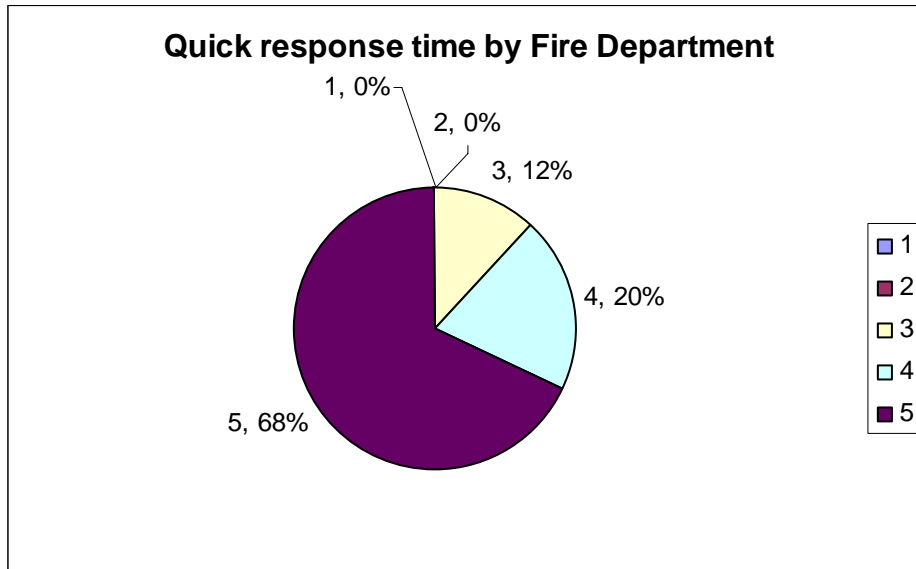
Question 1: Courteousness of 911 call taker. 8% answered with a ranking of 1, 16% answered with a ranking of 2, 32% answered with a ranking of 3, 24% answered with a ranking of 4, and 20% answered with a ranking of 5.



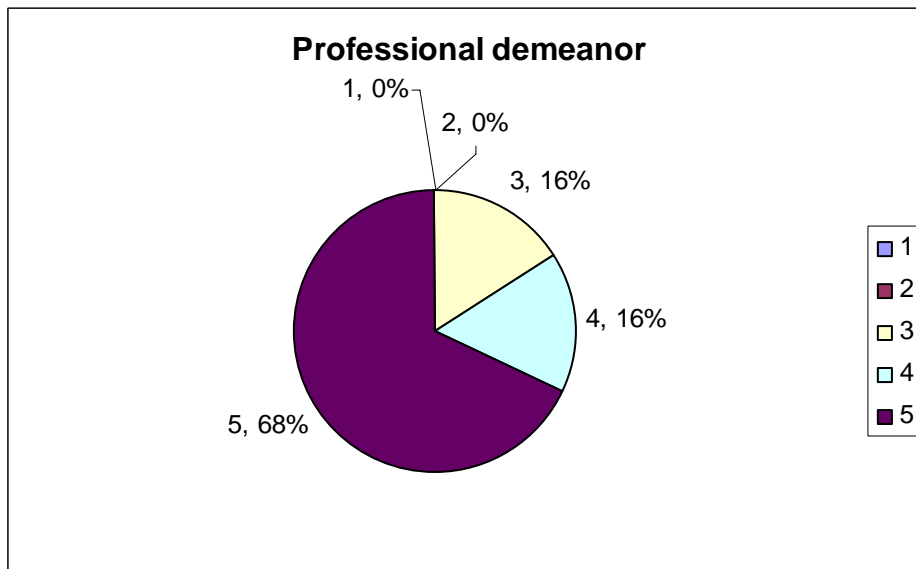
Question 2: Efficiency of 911 call taker. 4% answered with a ranking of 1, 0% answered with a ranking of 2, 4% answered with a ranking of 3, 16% answered with a ranking of 4, and 76% answered with a ranking of 5.



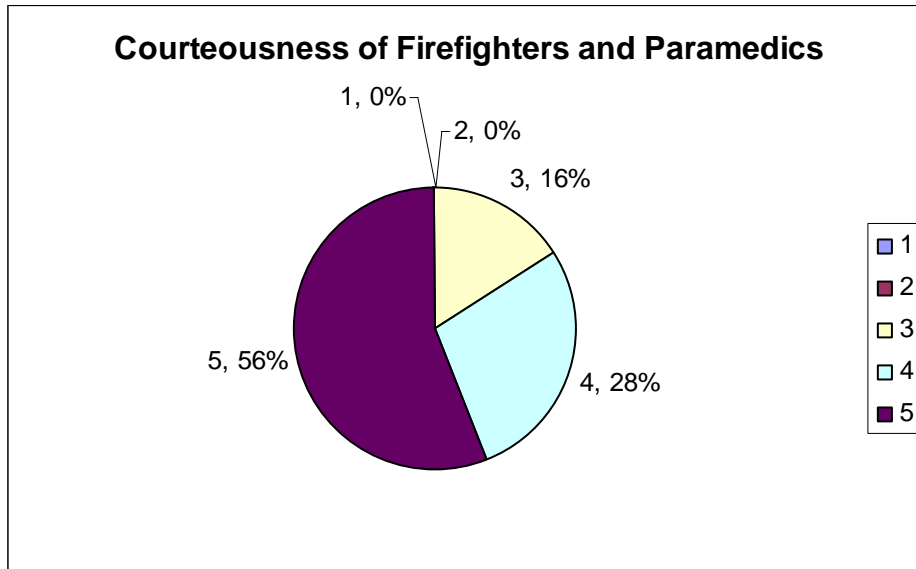
Question 3: Quick response time. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 12% answered with a ranking of 3, 20% answered with a ranking of 4, and 68% answered with a ranking of 5.



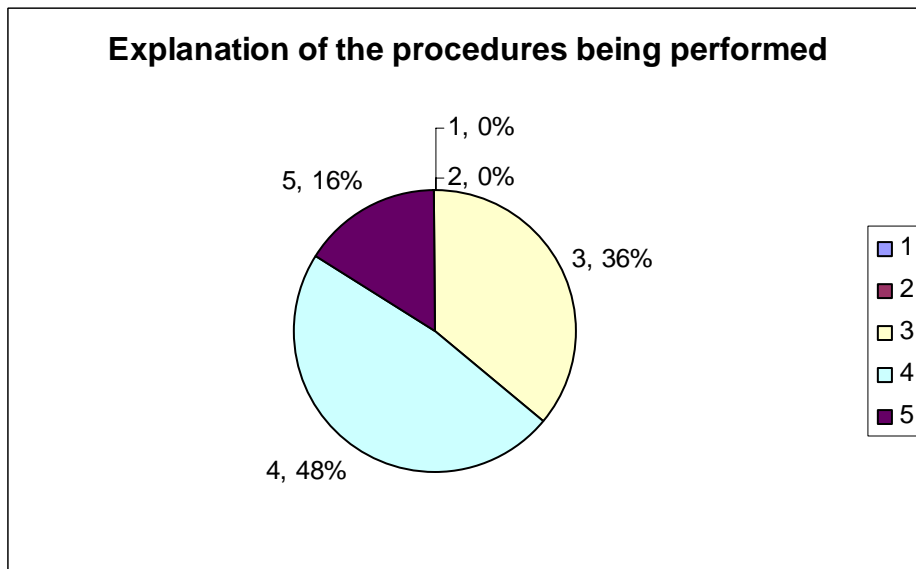
Question 4: Professional demeanor. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 16% answered with a ranking of 3, 16% answered with a ranking of 4, and 68% answered with a ranking of 5.



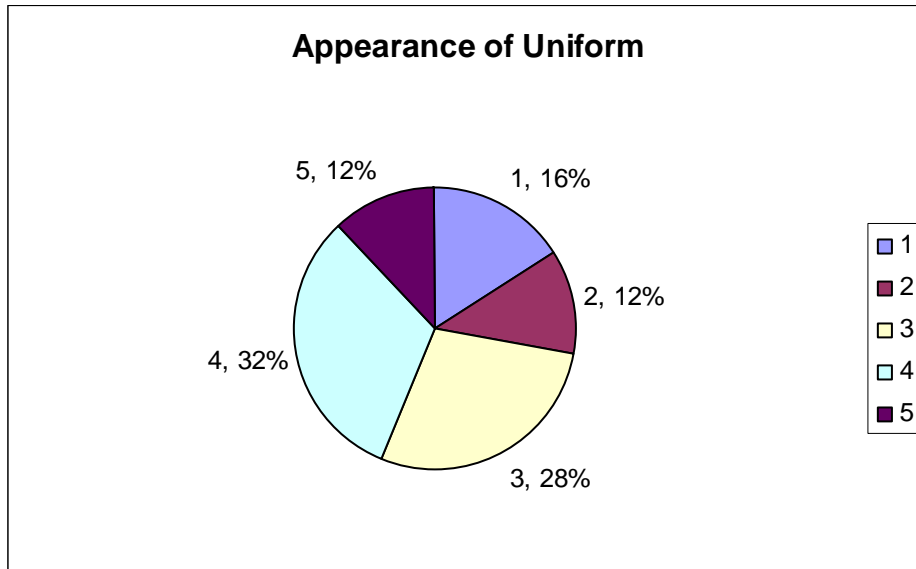
Question 5: Courteousness of Firefighters and Paramedics. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 16% answered with a ranking of 3, 28% answered with a ranking of 4, and 56% answered with a ranking of 5.



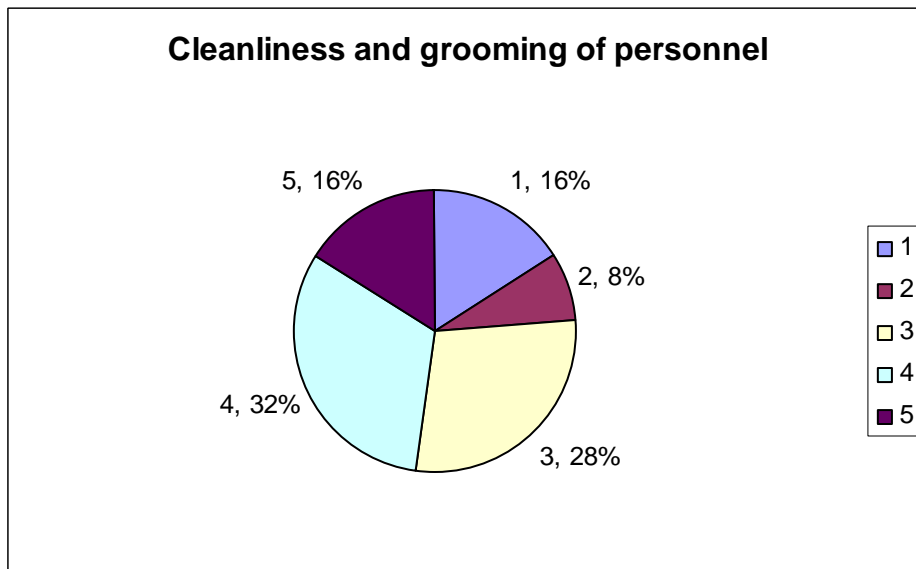
Question 6: Explanation of the procedures being performed. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 36% answered with a ranking of 3, 48% answered with a ranking of 4, and 16% answered with a ranking of 5.



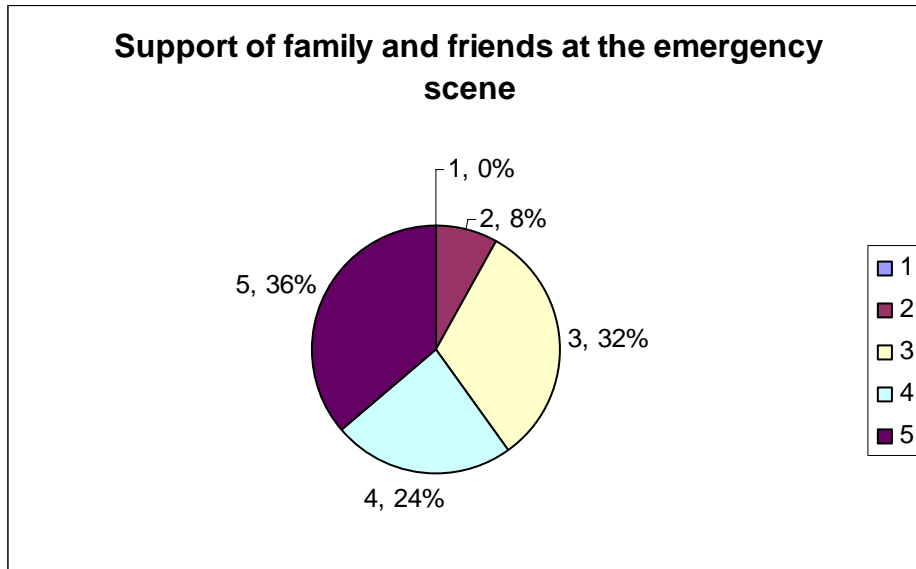
Question 7: Appearance of uniform. 16% answered with a ranking of 1, 12% answered with a ranking of 2, 28% answered with a ranking of 3, 32% answered with a ranking of 4, and 12% answered with a ranking of 5.



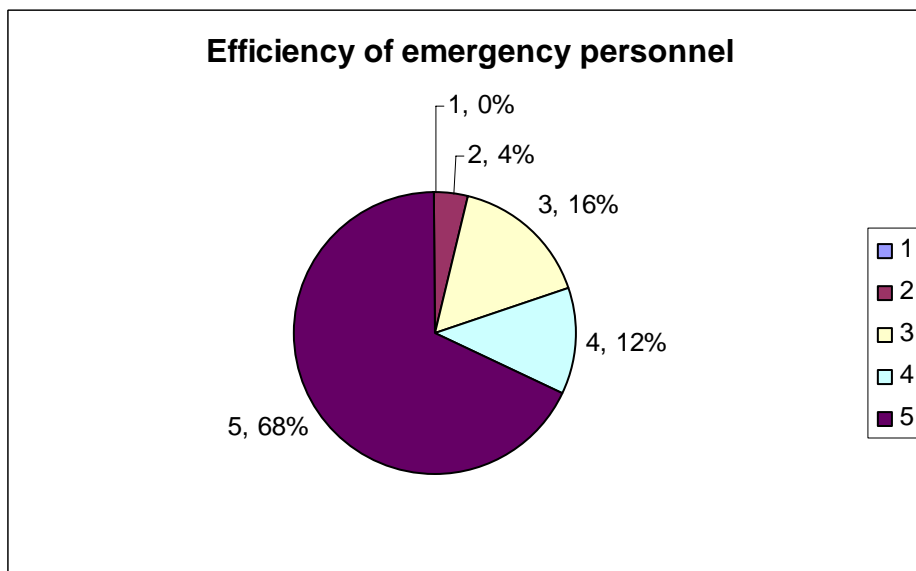
Question 8: Cleanliness and grooming of personnel. 16% answered with a ranking of 1, 8% answered with a ranking of 2, 28% answered with a ranking of 3, 32% answered with a ranking of 4, and 16% answered with a ranking of 5.



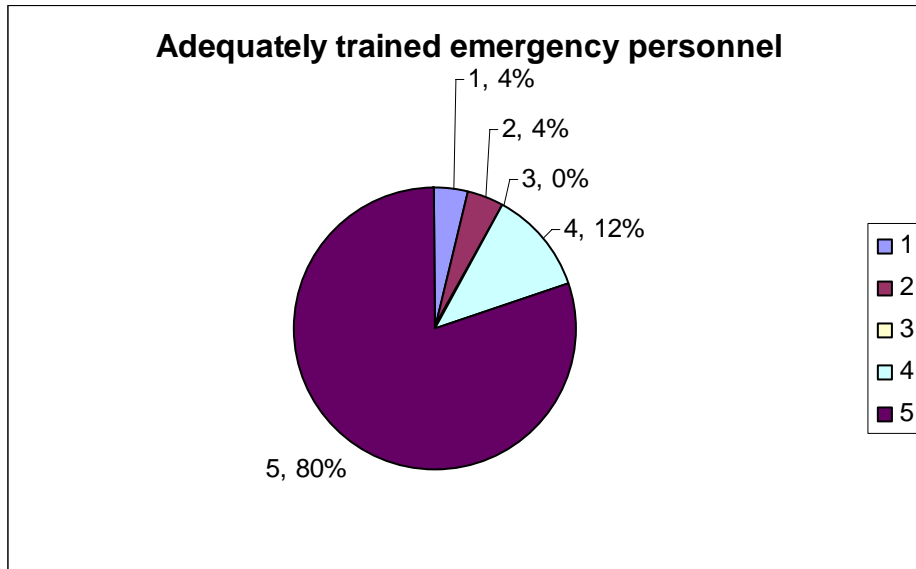
Question 9: Support family and friends at the emergency scene. 0% answered with a ranking of 1, 8% answered with a ranking of 2, 32% answered with a ranking of 3, 24% answered with a ranking of 4, and 36 % answered with a ranking of 5.



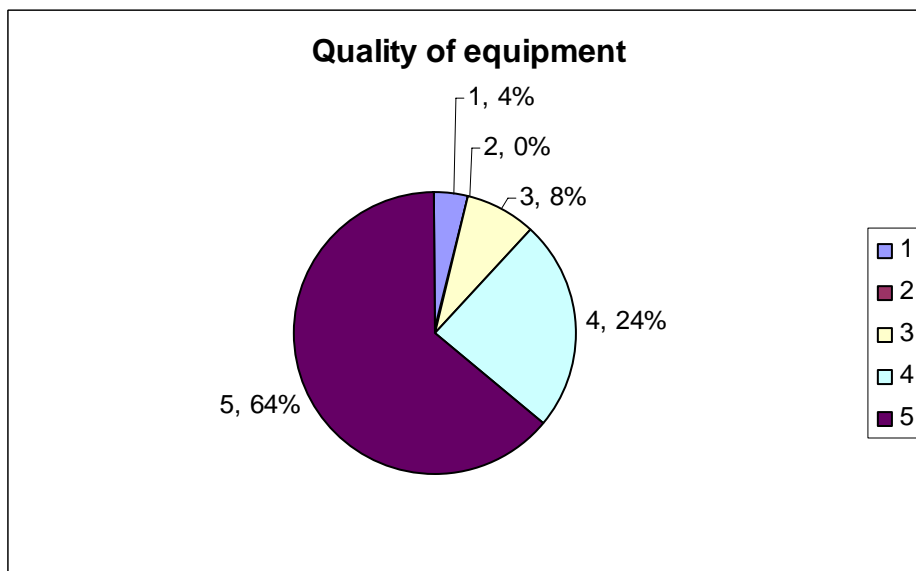
Question 10: Efficiency of emergency personnel. 0% answered with a ranking of 1, 4% answered with a ranking of 2, 16% answered with a ranking of 3, 12% answered with a ranking of 4, and 68% answered with a ranking of 5.



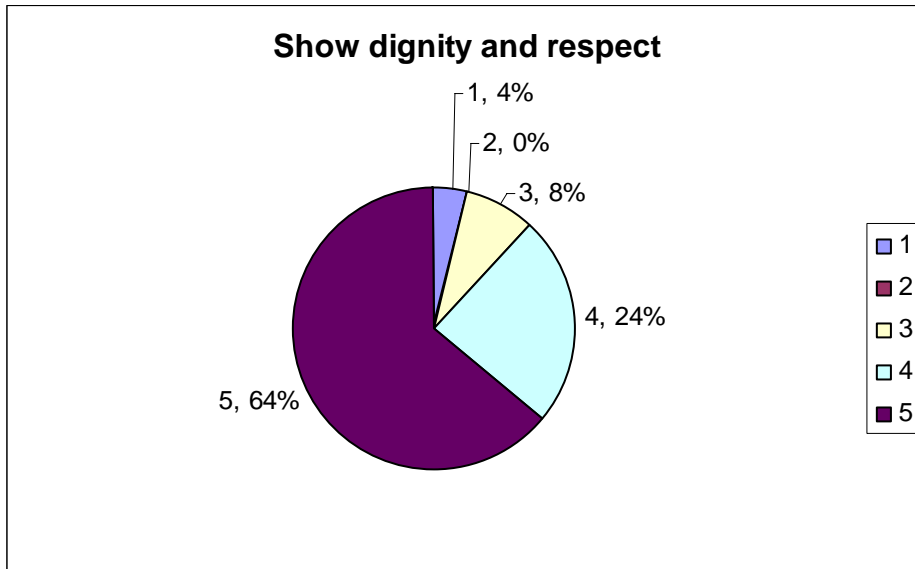
Question 11: Adequately trained emergency personnel. 4% answered with a ranking of 1, 4% answered with a ranking of 2, 0% answered with a ranking of 3, 12% answered with a ranking of 4, and 80% answered with a ranking of 5.



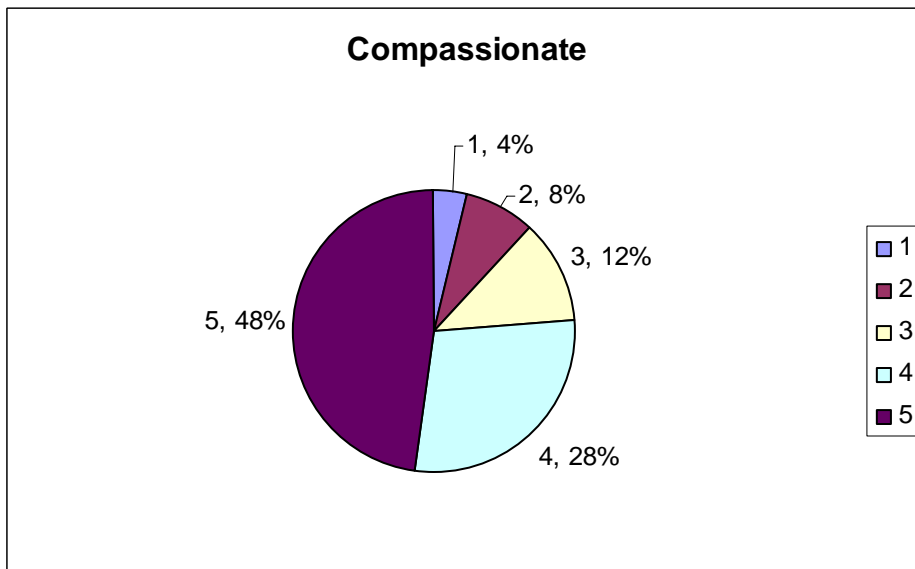
Question 12: Quality of equipment. 4% answered with a ranking of 1, 4% answered with a ranking of 2, 4% answered with a ranking of 3, 24% answered with a ranking of 4, and 64% answered with a ranking of 5.



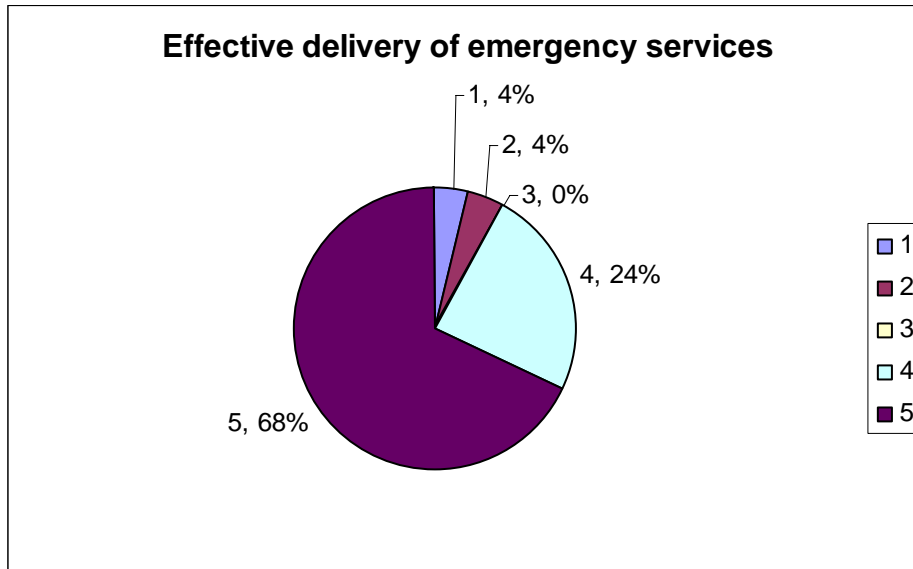
Question 13: Show dignity and respect. 4% answered with a ranking of 1, 0% answered with a ranking of 2, 8% answered with a ranking of 3, 24% answered with a ranking of 4, and 64% answered with a ranking of 5.



Question 14: Compassionate. 4% answered with a ranking of 1, 8% answered with a ranking of 2, 12% answered with a ranking of 3, 28% answered with a ranking of 4, and 48% answered with a ranking of 5.



Question 15: Effective delivery of emergency services. 4% answered with a ranking of 1, 4% answered with a ranking of 2, 0% answered with a ranking of 3, 24% answered with a ranking of 4, and 68% answered with a ranking of 5.

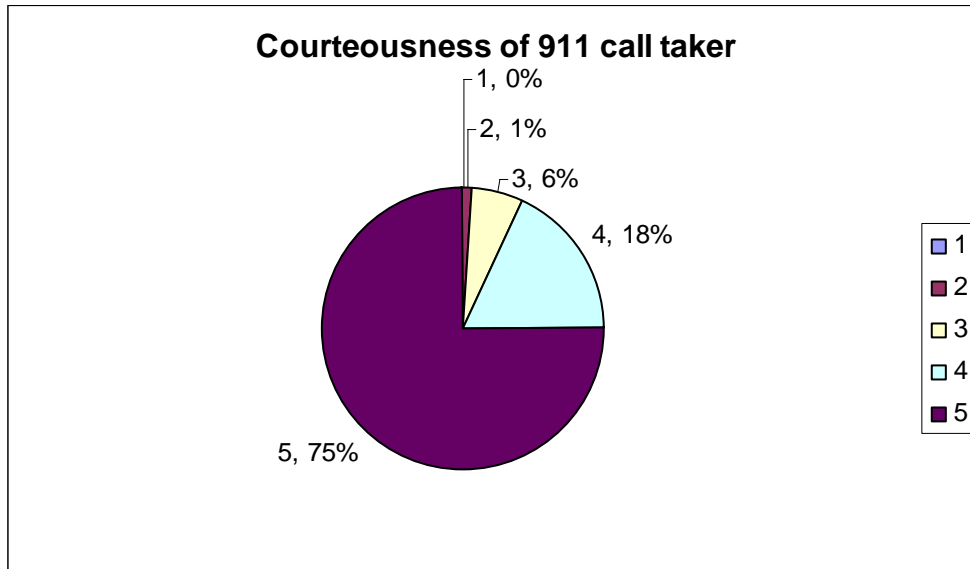


There were no specific recommendations or suggestions for additional criteria to be added to the survey.

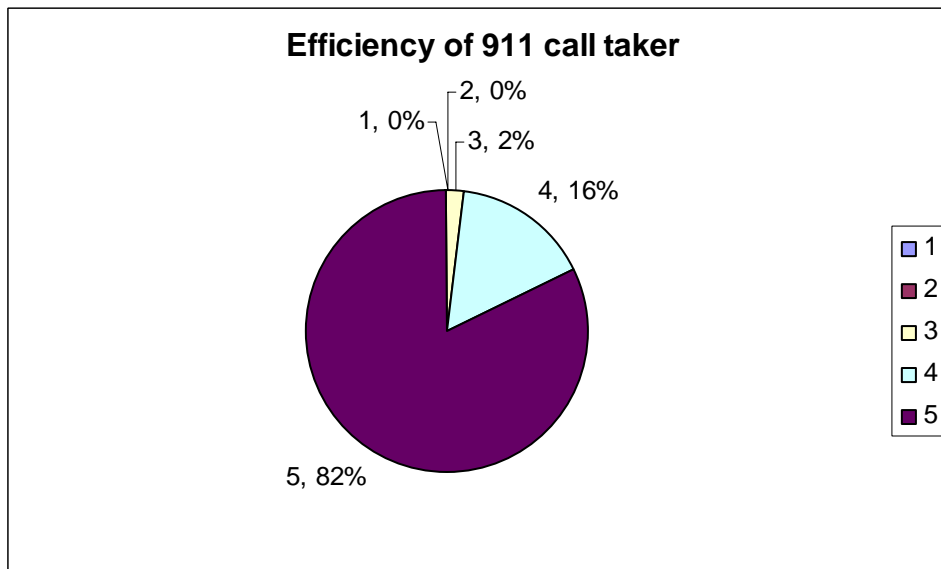
Research Question 5: What do the customers of L.B.F.D. think is important criteria to measure customer satisfaction?

Of the 320 customer satisfaction criteria surveys mailed to Laguna Beach residents, 287 were deliverable and 96 (33%) replied. Each question utilized a ranked scale format from 1 to 5 and could only have one answer. A ranking of 1 is the lowest level of importance and a ranking of 5 is the highest level of importance. Listed is the response to each question and a corresponding graph.

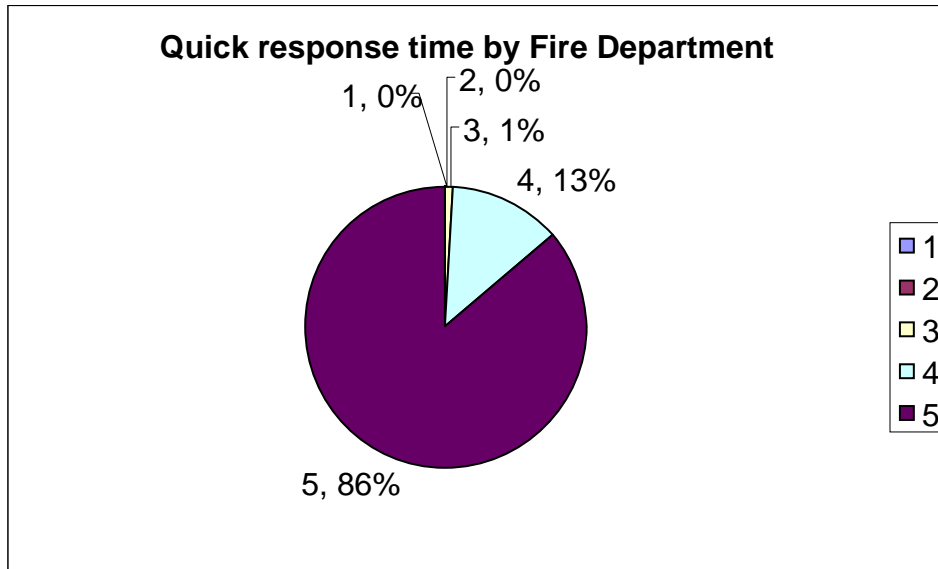
Question 1: Courteousness of 911 call taker. 0% answered with a ranking of 1, 1% answered with a ranking of 2, 6% answered with a ranking of 3, 18% answered with a ranking of 4, and 75% answered with a ranking of 5.



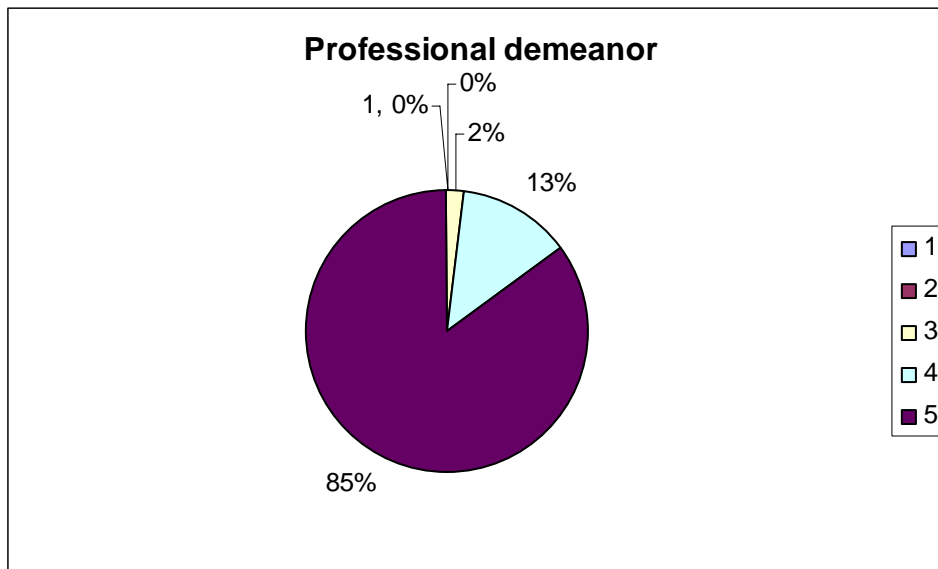
Question 2: Efficiency of 911 call taker. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 2% answered with a ranking of 3, 16% answered with a ranking of 4, and 82% answered with a ranking of 5.



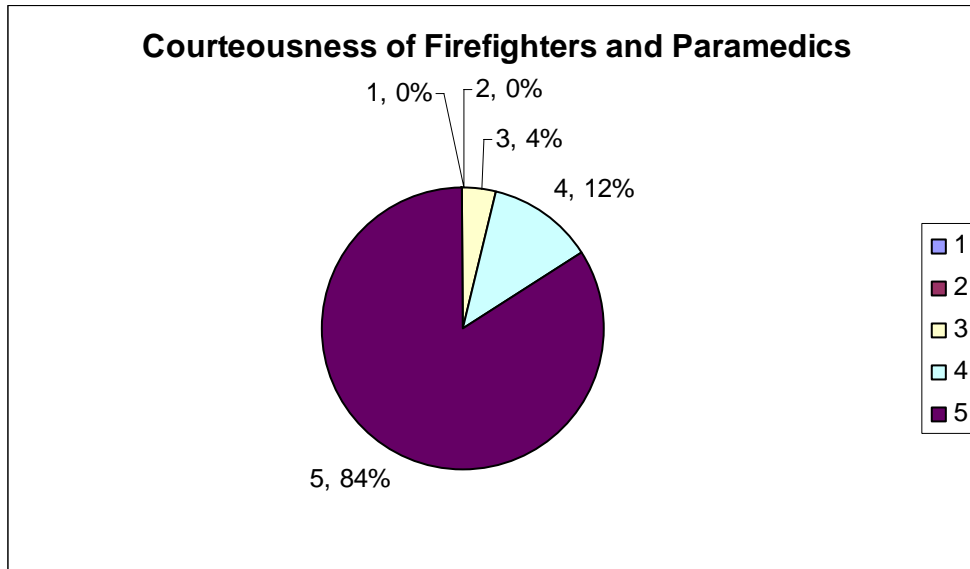
Question 3: Quick response time. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 1% answered with a ranking of 3, 13% answered with a ranking of 4, and 86% answered with a ranking of 5.



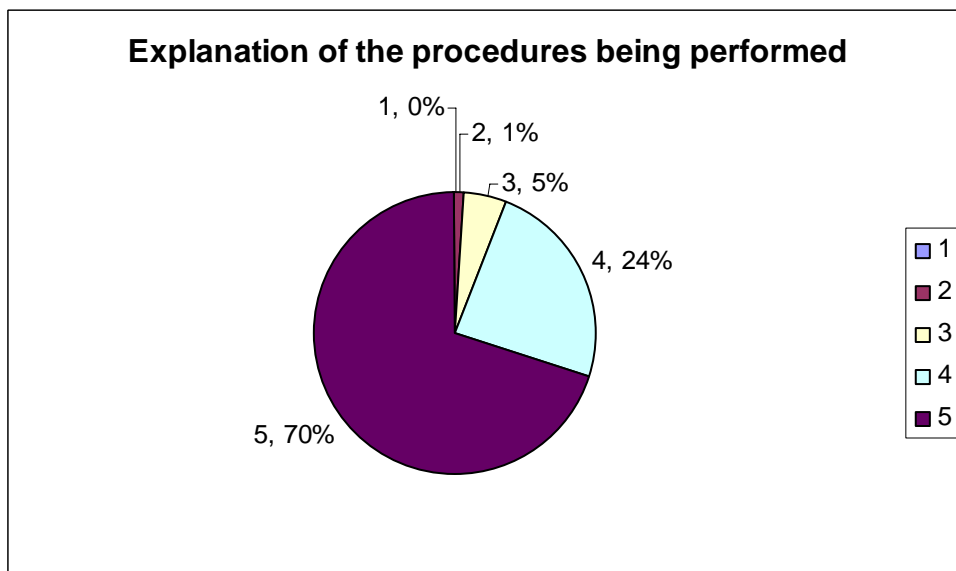
Question 4: Professional demeanor. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 2% answered with a ranking of 3, 13% answered with a ranking of 4, and 85% answered with a ranking of 5.



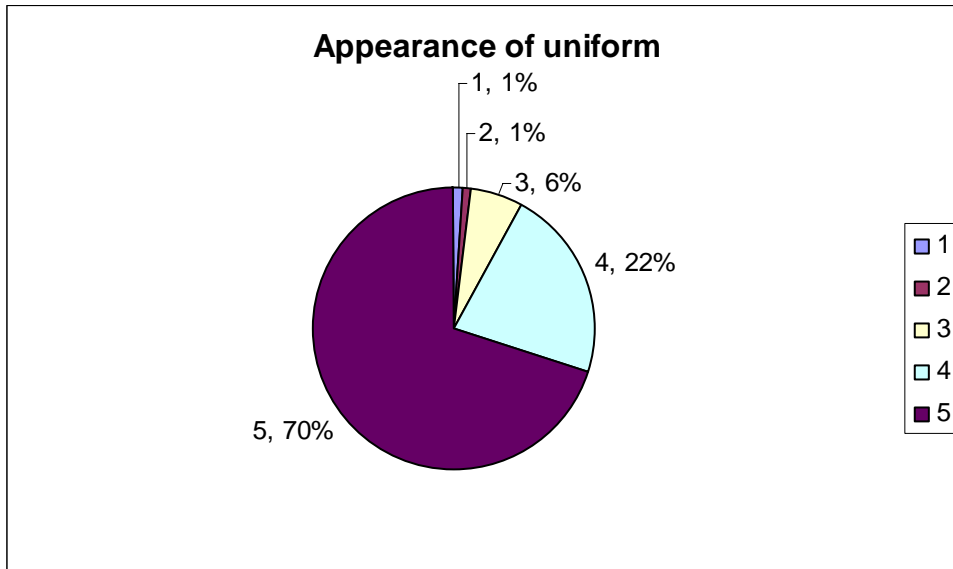
Question 5: Courteousness of Firefighters and Paramedics. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 4% answered with a ranking of 3, 12% answered with a ranking of 4, and 84% answered with a ranking of 5.



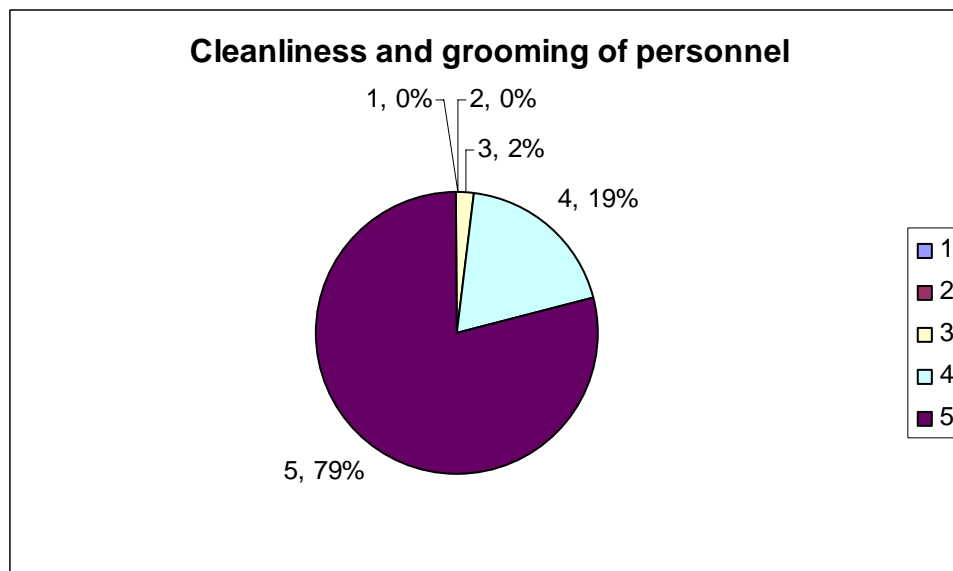
Question 6: Explanation of the procedures being performed. 0% answered with a ranking of 1, 1% answered with a ranking of 2, 5% answered with a ranking of 3, 24% answered with a ranking of 4, and 70% answered with a ranking of 5.



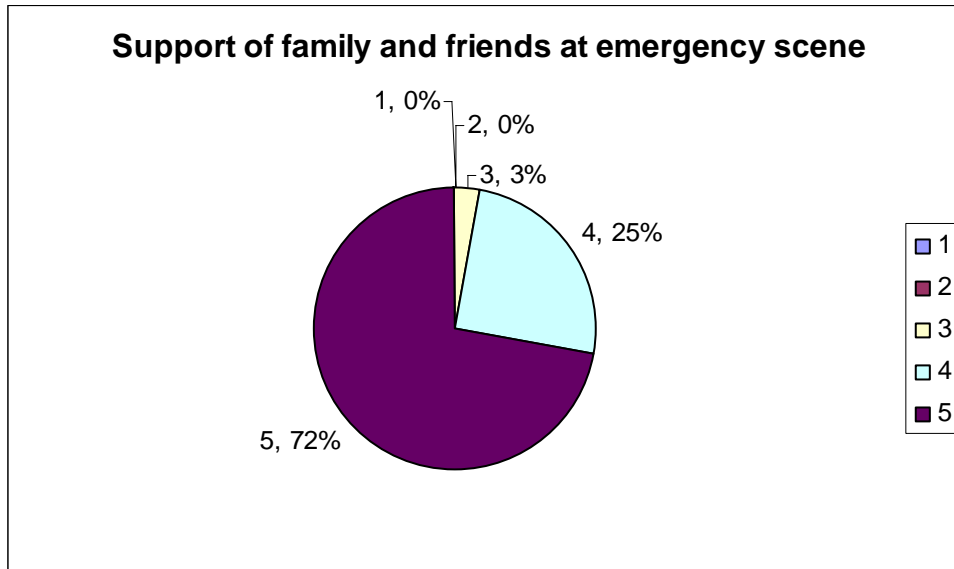
Question 7: Appearance of uniform. 1% answered with a ranking of 1, 1% answered with a ranking of 2, 6% answered with a ranking of 3, 22% answered with a ranking of 4, and 70% answered with a ranking of 5.



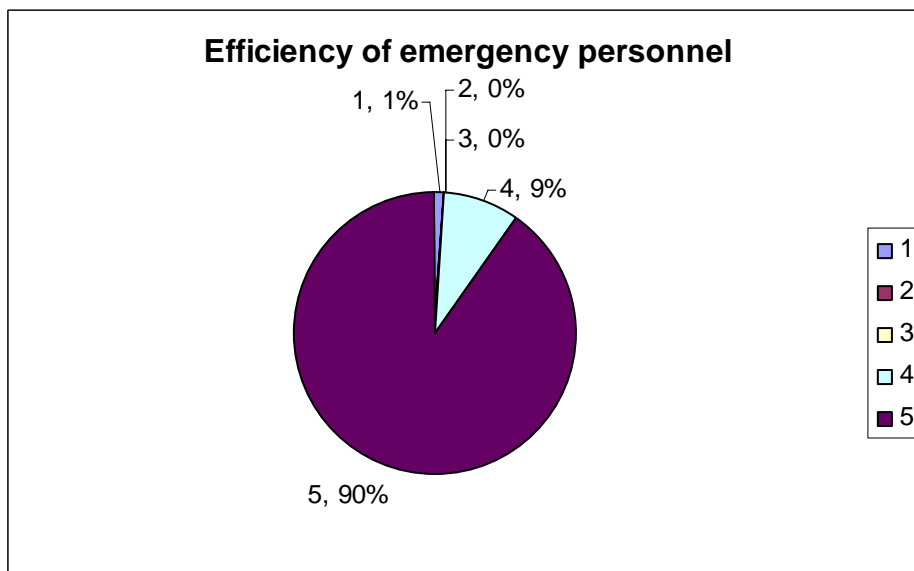
Question 8: Cleanliness and grooming of personnel. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 2% answered with a ranking of 3, 19% answered with a ranking of 4, and 79% answered with a ranking of 5.



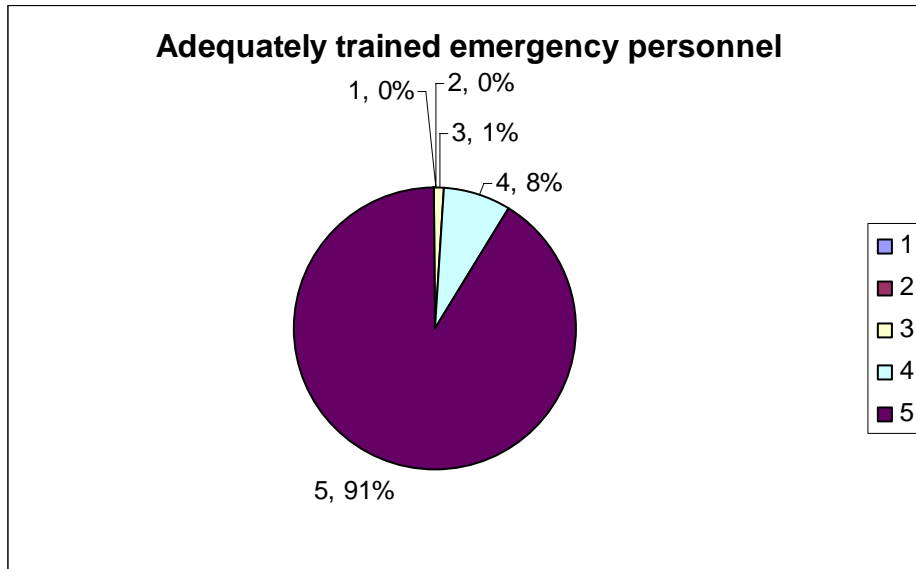
Question 9: Support family and friends at the emergency scene. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 3% answered with a ranking of 3, 25% answered with a ranking of 4, and 72% answered with a ranking of 5.



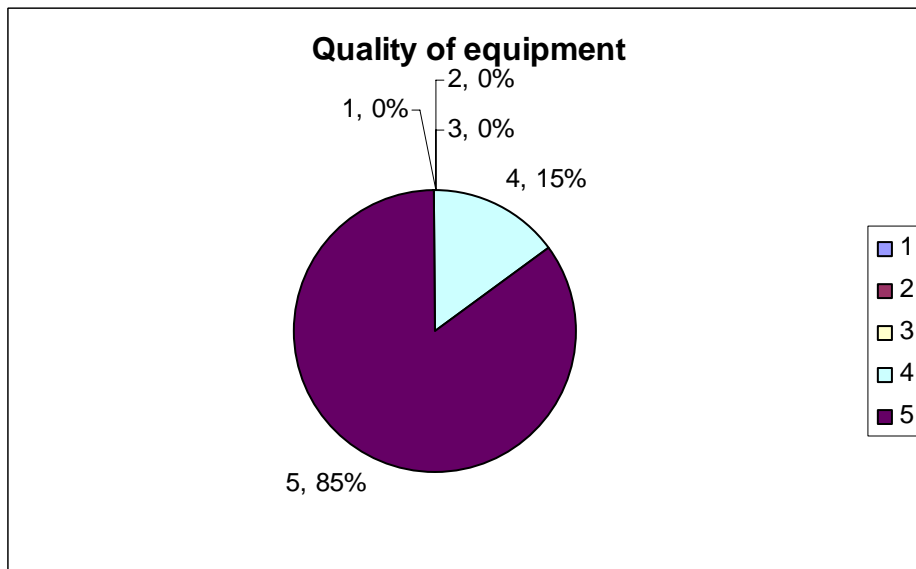
Question 10: Efficiency of emergency personnel. 1% answered with a ranking of 1, 0% answered with a ranking of 2, 0% answered with a ranking of 3, 9% answered with a ranking of 4, and 90% answered with a ranking of 5.



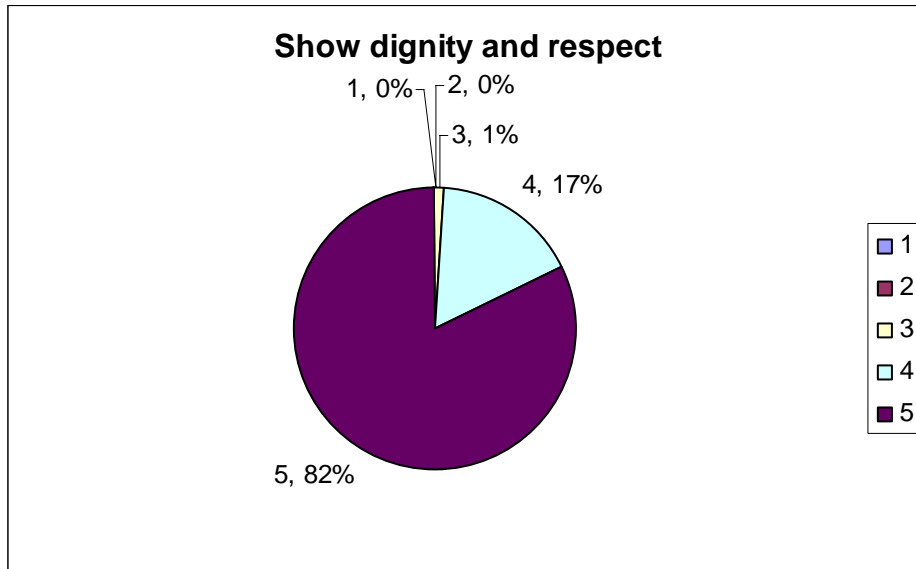
Question 11: Adequately trained emergency personnel. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 1% answered with a ranking of 3, 8% answered with a ranking of 4, and 91% answered with a ranking of 5.



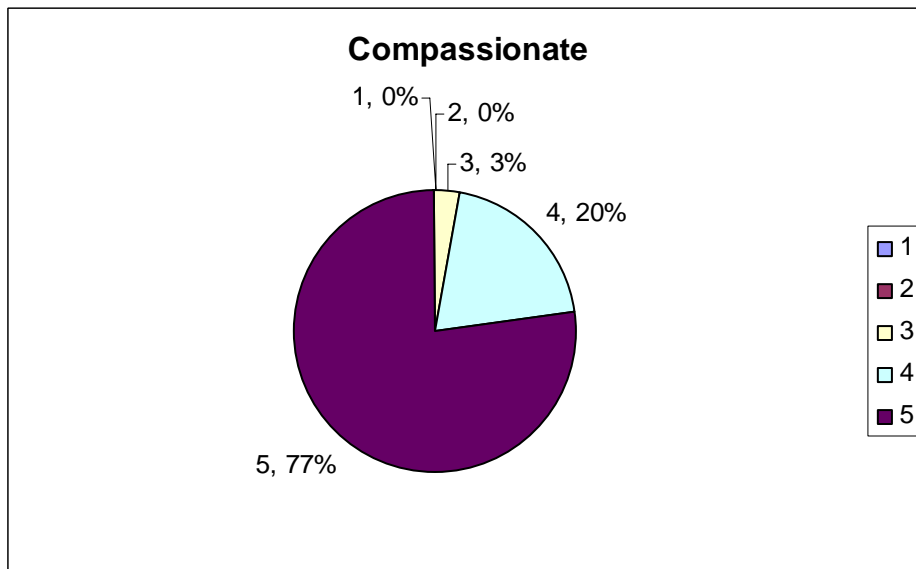
Question 12: Quality of equipment. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 0% answered with a ranking of 3, 15% answered with a ranking of 4, and 85% answered with a ranking of 5.



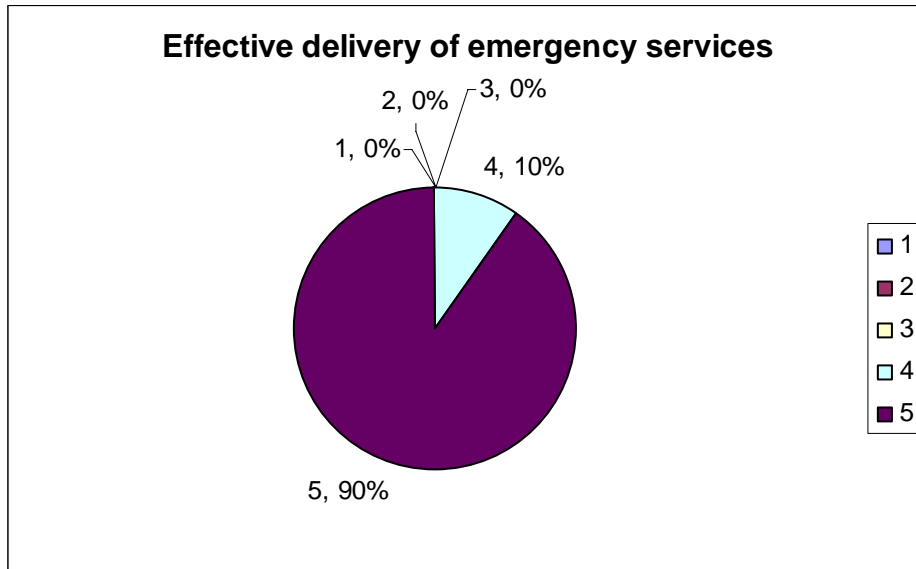
Question 13: Show dignity and respect. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 1% answered with a ranking of 3, 17% answered with a ranking of 4, and 82% answered with a ranking of 5.



Question 14: Compassionate. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 3% answered with a ranking of 3, 20% answered with a ranking of 4, and 77% answered with a ranking of 5.



Question 15: Effective delivery of emergency services. 0% answered with a ranking of 1, 0% answered with a ranking of 2, 0% answered with a ranking of 3, 10% answered with a ranking of 4, and 90% answered with a ranking of 5.



There were no specific recommendations or suggestions for additional criteria to be added to the survey. A generic customer satisfaction survey was designed utilizing the results of the Customer Satisfaction Criteria surveys (Appendix G). The 10 question survey is appropriate for all types of emergency services provided and can be answered in less than five minutes. A comments section was included and a contact name and phone number were included. A cover letter was developed (appendix F) which covers the nine points necessary for an effective cover letter (Shaver, 1999, p. 270).

The most effective way for L.B.F.D. to administer the survey is to utilize first class mail. A random sample will be generated monthly from the *n*th number of customers. The goal is to survey 10% or approximately 240 customers per year. The data will be entered into a pre-coded spreadsheet so that reports can be easily generated. Approximately 20 random surveys will be mailed monthly providing L.B.F.D. with monthly and running total survey results.

Discussion

Service quality has a direct correlation with citizen confidence in government (Osbourne, 2004, p. 209). It is important for organizations to realize that the customer is a vital component to the systems approach of marketing and managing (Woods, 1999, p. 8). The process of obtaining customer feedback is completing the loop for continual improvement of products and services (Deming, 1994, p. 59). The success of an organization is dependent upon their ability to identify what the customer needs and continually improve their product and services. It is clear from the percentage of customer satisfaction criteria surveys returned that the residents of Laguna Beach appreciate the ability to provide input.

Evans (2003), states the importance of gaining buy-in from the union and approaching the implementation of a customer satisfaction survey as a collaborative effort. Comments from local 3684 (Laguna Beach Firefighter's Union) were generally positive in nature and supportive of implementation of a customer satisfaction survey. The Union's primary concern is that the survey information be used solely as a quality improvement tool. Clearly this is one of the goals as the survey will help to identify strengths, weaknesses, opportunities, and threats (Shaver, 1999, p. 270). Another union request was that the survey be administered by Staff and not line personnel. Logistically this request makes the most sense since the *n*th random sampling technique is being utilized (Gillham, 2000).

The importance of a clear and concise cover letter that contains all nine of the basic components cannot be overstated (Shaver, 1999, p. 270). The cover letter that was mailed with the customer satisfaction criteria survey was clear and concise. The directions were very careful to explain that the intent of the survey was to gather information to develop a future customer satisfaction survey. The letter also asked the customer not to rate their recent experience with the Fire Department, instead rate the value of each characteristic included in the survey.

However, the overwhelming majority of the citizen respondents misunderstood the intent of the survey and rated their recent experience with Fire Department services. This became obvious when the comments section contained specific remarks concerning their recent experience. Over half the surveys contained a brief written description of the respondent's gratitude or favorable impression of the Fire Department.

Many Laguna Beach residents did read the cover letter completely and completed the survey as requested. This was most apparent when the response to questions three and seven were compared. Question three asked to rank the importance of a quick response time by the Fire Department while question seven asked to rank the importance of the appearance of the uniform. While appearance of the uniform may be important, a quick response time by the Fire Department should receive a higher scaled response. Conversely, many respondents simply ranked every category with the highest scaled response possible. Consequently, the data collected from the citizen survey is considered flawed but it did provide valuable feedback that was included in the final design of the survey instrument.

Deming (1994) suggests organizations should not be overly reliant upon customer feedback. It was for this reason that multiple sources of data were used to develop the L.B.F.D. Customer Satisfaction survey. The Laguna Beach firefighter's response was much different than the citizen's response. Several factors likely contributed to the objective responses provided by the firefighters. Probably the most significant contributing factors were the delivery of verbal directions prior to completing the survey and knowledge that a customer satisfaction survey did not yet exist.

The feedback provided by the firefighters offered opportunities to refine and improve the customer satisfaction survey instrument. Utilizing the Customer Satisfaction Survey Criteria instrument as the basis for refinement, the goal was to condense the survey and make it focused,

brief, and simple (Alreck & Settle, 1995). The final product consists of ten ranked questions and a comments section with contact person information.

The survey of Orange County Fire Departments was useful information for implementing a customer satisfaction survey. While the decision to implement the survey was not made as a result of the number of department's currently measuring customer satisfaction, it is valuable to know what other organizations are doing and how they are doing it. This information can be utilized to justify budget expenditures for maintaining and improving customer satisfaction surveys. The likelihood of obtaining customer satisfaction data from other organizations for comparative studies is more likely to be successful when reciprocal information can be provided.

Recommendations

The following recommendations should be implemented by the Laguna Beach Fire Department:

1. Develop and implement a policy and procedure to be incorporated into the Fire Department's Standard Operating Procedures. The policy and procedure should identify the administration, authority, role, and responsibilities associated with managing the Customer Satisfaction Survey.
2. Identify and secure funding to support the ongoing administration of the Customer Satisfaction Survey.
3. Train the Fire Department Administrative Assistant how to develop a random data base of emergency services customers, perform a mail merge for form letters, enter data from returned surveys, and generate reports.
4. Incorporate the Customer Satisfaction Survey results into the EMS Division's Continuing Quality Improvement Program.

5. Consider alternatives to develop a web based Customer Satisfaction Survey that would compliment the mail based system.
6. Consider the development and implementation of a survey that could measure customer satisfaction for fire prevention services.
7. Publish the results on the Fire Department website for members to view.
8. Management Staff should regularly review reports generated from the survey data to assist in identifying strengths, weaknesses, opportunities and threats and act accordingly.
9. An in-service customer satisfaction training program should be developed and implemented to discuss and instruct the latest trends in customer service satisfaction.
10. Develop and implement an internal customer satisfaction survey for use by all Laguna Beach Fire personnel.

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Emergency Services Customer Satisfaction Survey Criteria

The Fire Department would like to develop a customer satisfaction survey for suppression and emergency medical services. Your suggestions are needed to design a quality survey instrument. Please rate the criteria below by circling the number that best represents its importance to exceptional service delivery. One (1) is the lowest score and five (5) is the highest score.

	Lowest				Highest
1. Courteousness of 911 call taker	1	2	3	4	5
2. Efficiency of 911 call taker	1	2	3	4	5
3. Quick response time by Fire Department	1	2	3	4	5
4. Professional demeanor	1	2	3	4	5
5. Courteousness of Firefighters and Paramedics	1	2	3	4	5
6. Explanation of the procedures being performed	1	2	3	4	5
7. Appearance of uniform	1	2	3	4	5
8. Cleanliness and grooming of personnel	1	2	3	4	5
9. Support of family and friends at the emergency scene	1	2	3	4	5
10. Efficiency of emergency personnel	1	2	3	4	5
11. Adequately trained emergency personnel	1	2	3	4	5
12. Quality of equipment	1	2	3	4	5
13. Show dignity and respect	1	2	3	4	5
14. Compassionate	1	2	3	4	5
15. Effective delivery of emergency services	1	2	3	4	5

Please feel free to write suggestions for additional criteria in the space provided below.

Thank you!

Fire Department Services Customer Satisfaction Survey Criteria

Please rate each criteria based on how you value its importance to the delivery of emergency services. For each question circle a number from 1 to 5. The number 1 is the lowest possible rating and 5 is highest possible rating.

	Lowest				Highest
1. Courteousness of 911 call taker	1	2	3	4	5
2. Efficiency of 911 call taker	1	2	3	4	5
3. Quick response time by Fire Department	1	2	3	4	5
4. Professional demeanor	1	2	3	4	5
5. Courteousness of Firefighters and Paramedics	1	2	3	4	5
6. Explanation of the procedures being performed	1	2	3	4	5
7. Appearance of uniform	1	2	3	4	5
8. Cleanliness and grooming of personnel	1	2	3	4	5
9. Support of family and friends at the emergency scene	1	2	3	4	5
10. Efficiency of emergency personnel	1	2	3	4	5
11. Adequately trained emergency personnel	1	2	3	4	5
12. Quality of equipment	1	2	3	4	5
13. Show dignity and respect	1	2	3	4	5
14. Compassionate	1	2	3	4	5
15. Effective delivery of emergency services	1	2	3	4	5

Please feel free to write suggestions for additional criteria in the space provided below.

Thank you!

Firefighter's name:

The Fire Department is committed to developing a quality customer satisfaction survey for fire suppression and EMS incidents. We are interested in getting your input regarding the criteria that should be used to measure customer satisfaction. Attached to this cover letter is a simple form that may be easily completed. Please take 5 minutes and make your opinion count. Once completed please put the form in the inter-department mail attention Carrie.

Thank you,

Kris

May 2, 2006

Resident
{address}
Laguna Beach, CA 92651

Dear Laguna Beach Resident:

The Laguna Beach Fire Department is respectfully seeking your opinion to help establish the criteria that should be used to measure customer satisfaction with Fire Department services. You were chosen because the Laguna Beach Fire Department recently provided emergency services at the above address. The intent of the survey is to rate how you value each of listed characteristics, not to rate your recent experience with the Laguna Beach Fire Department.

The information you provide will help us to develop a customer satisfaction survey. We would appreciate your devoting five minutes of your time to complete the enclosed survey and returning it in the addressed, postage paid envelope. Your feedback is confidential and will provide the Laguna Beach Fire Department with information that will assist toward identifying opportunities to develop a customer satisfaction survey. Please feel free to call Carrie Joyce, Administrative Assistant at 497-0700 should you have any questions or comments.

Sincerely,

Kris Head, Battalion Chief
Laguna Beach Fire Department

Enclosure

Orange County Fire Department Customer Satisfaction Survey Status

Fire Department	Customer Satisfaction Surveys		Survey Type			Administration		Services Surveyed		
	Yes	No	Mail	Interviews	Other	Random	% Surveyed	EMS	Prevention	Other
Anaheim	1		1			1	5%	1		
Brea		1								
Costa Mesa		1								
Fountain Valley		1								
Fullerton		1								
Garden Grove		1								
Huntington Beach	1		1			1	20%	1		
Newport Beach		1								
Orange										
Orange County Fire Authority	1		1				100%	1	1	1
Santa Ana		1								
Totals	3	7	3					3	1	1



May 21, 2006

Resident
{Address}
Laguna Beach, CA 92651

Dear Laguna Beach Resident:

The Laguna Beach Fire Department is respectfully seeking your opinion to measure customer satisfaction for Fire Department services. You were chosen because the Laguna Beach Fire Department recently provided emergency services at the above address. The intent of the survey is to rate your recent experience with the Laguna Beach Fire Department.

The information you provide will help us to understand current customer satisfaction levels. We would appreciate your devoting five minutes of your time to complete the enclosed survey and returning it in the addressed, postage paid envelope. Your feedback is confidential and will provide the Laguna Beach Fire Department with information that will assist in identifying opportunities to continually improve the quality of services. Please feel free to call Carrie Joyce, Administrative Assistant at 497-0700 should you have any questions or comments.

Sincerely,

Mike Macey, Fire Chief
Laguna Beach Fire Department

Enclosure

**Laguna Beach Fire Department
Emergency Services Customer Satisfaction Survey**

We would like your feedback regarding your recent experience with the Laguna Beach Fire Department. Your input is needed for continual improvement of emergency services. Please rate the criteria below by circling the number that best represents the level of service you received. One (1) is the lowest score and five (5) is the highest score.

	Unacceptable	Needs Improvement	Acceptable	Very Good	Outstanding
1. Efficiency of 911 call taker	1	2	3	4	5
2. Quick response time by Fire Department	1	2	3	4	5
3. Professional demeanor	1	2	3	4	5
4. Courteousness of Firefighters and Paramedics	1	2	3	4	5
5. Explanation of the procedures being performed	1	2	3	4	5
6. Grooming and appearance of personnel	1	2	3	4	5
7. Support of family and friends at the emergency scene	1	2	3	4	5
8. Adequately trained emergency personnel	1	2	3	4	5
9. Compassionate	1	2	3	4	5
10. Effective delivery of emergency services	1	2	3	4	5

Please feel free to write suggestions or additional comments in the space provided below.

Please feel free to call Carrie Joyce, Administrative Assistant at 497-0700 should you have any questions or comments. Please return this survey in the addressed, postage paid envelope. Thank you!

